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TM(ADC)820/252/00A

TECHNICAL MEMORANDUM

(TM Series)

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SAGE Unique-to-Site Environmental
Data and Equipment Assignments
Portland ADS

by

D. M. McDaniel

9 April 1963

SYSTEM

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SANTA MONICA

CALIFORNIA

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404 696

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INTRODUCTION

This volume of the TM(ADC)820 Series contains the official SAGE unique-to-site environmental data and equipment assignments which are to be used in adapting the Model 9 computer programs and in Simplex Data Distribution Unit terminal assignments for the Portland Air Defense Sector. Certain adaptation data such as facility locations, characteristics, and other related data which apply to all sectors, is presented in volumes 3 through 7 of this TM series. The reader is referred to Volume Ø of this series for a detailed list of contents of all volumes.

SAGE Unique-to-Site Equipment Review (USER) Committee signatures appear on page 5 of this document, with initials indicating approval, concurrence or review, as appropriate.

ADCM 55-32 currently defines adaptation data as being of two categories: 1) Controlled Data; and 2) Field Controlled Data. A portion of this document is ADC Controlled Data and therefore constitutes a reason for the ADC Foreword page and NORAD Preface page authorizing the use of this data. However, since this document also contains Field Controlled Data, e.g.: "Times-2" display data; Manual Input data; etc, it is noted here that the aforementioned military preface and foreword page do not in any way usurp the position of the Division and Sector Commanders as delegated in ADCM 55-32, but instead reflect recognition of data forwarded by those Commanders to SDC.

Discrepancies noticed in any part of this document by SDC on-site programming teams should be forwarded to the authors utilizing current established procedures. Revisions to this document will be published as data changes occur or when practical. Changes to previous data will be indicated by use of a "▷" next to the data change.

SERIES CONTENTS

VOLUME	Ø	Series Description
VOLUME	1	Adaptation I/O Limits and Drum Channel Requirements
VOLUME	2	Sector Environment Summaries
VOLUME	3	Sector and Region Positional Data
VOLUME	4	Radar Adaptation Data
VOLUME	5	Voice and Data-Link Communications Adaptation Data
VOLUME	6	Airbase and BOMARC Squadron Adaptation Data
VOLUME	7	ANA Site Adaptation Data
VOLUME	10	Unified Adaptation Guide for Region and Sector Data
VOLUME	250 through 351	SAGE Unique-to-Site Environmental Data and Equipment Assignments

9 April 1963

2

TM(ADC)820/252/00A

LIST OF EFFECTIVE PAGES

This page is a reference of changes to this volume and contains a complete index of all effective pages.

Page No.	Change Letter	Publication Date	Page No.	Change Letter	Publication Date
1-2	A	9 April 63			
3-5	Basic	15 Oct 62			
6	A	9 April 63			
7	Basic	15 Oct 62			
8-11	A	9 April 63			
12	Basic	15 Oct 62			
13-14	A	9 April 63			
15-16	Basic	15 Oct 62			
17	A	9 April 63			

15 October 1962

5

TM(ADC)820/252/00

USER COMMITTEE SIGNATURES

	APPROVAL	CONCURRENCE	REVIEW
APASTO <i>Wm H. Aderhold</i> <small>LT. COL., USAF</small>	<i>WHA</i>		
SDC (DAS) <i>A. D. Marshall</i>		<i>Ru</i>	
WE/ADES <i>E. L. Lyons, Jr.</i>			<i>E. L. Lyons, Jr.</i>
IBM <i>D. C. Lee</i>			<i>D. C. Lee</i>

The SAGE Unique-to-Site Equipment Review (USER) Committee signatures appearing on this page only apply to the following sections:

Section 2.4	IRI drum channel assignments
Section 6.2	Interrel-Tell input channel assignments
Section 6.3	Ground-to-ground data link output assignments
Section 6.4	Ground-to-air data link output assignments
Section 6.5	Teletype output assignments

All other sections of this document need not be reviewed by the USER committee. This page will only be reissued when changes to the above mentioned sections are made.

INDEX PAGE

1.0 SECTOR POSITIONAL DATA

- 1.1 SECTOR PROGRAM BOUNDARIES
 - 1.1.1 MODE I BOUNDARY
 - 1.1.2 MODE II BOUNDARIES
- 1.2 MAJOR WORLD GEOREFS SURROUNDING X1 AREA
- 1.3 ADJACENT AUTOMATIC AND MANUAL SECTORS
- 1.4 LAND SEA LINES
- 1.5 AIR DEFENSE IDENTIFICATION ZONE
- 1.6 SECTOR MINIMUM ENROUTE ALTITUDE
- 1.7 TACAN TRANSMITTER NEAREST SECTOR CENTER
- 1.8.0 MAGNETIC VARIATION LINES
- 1.8.1 MAGNETIC VARIATION AT SECTOR CENTER
- 1.9 X2 DISPLAY DATA

2.0 RADAR DATA

- 2.1 LONG RANGE RADARS - LRR - HF - ALRR
- 2.2 GAP FILLER RADARS
- 2.3 LOCATION OF POINT NOT WITHIN ANY HF SHADOW AREA
- 2.4 LRR DRUM CHANNEL ASSIGNMENTS

3.0 AIRBASE DATA

- 3.1 MANNED INTERCEPTOR AIR BASES AND SQUADRONS
- 3.2 SAC/MATS BASES

4.0 ROMARC DATA

- 4.1 ROMARC A BASES
- 4.2 ROMARC B BASES

5.0 ARMY AIR DEFENSE COMMAND POST (AADCP) DATA

6.0 COMMUNICATIONS DATA

- 6.1 TIME DIVISION DATA LINK RADIO SITES
- 6.2 LATERAL-TELL INPUT CHANNEL ASSIGNMENTS
- 6.3 GROUND TO GROUND DATA LINK OUTPUT ASSIGNMENTS
- 6.4 GROUND TO AIR DATA LINK OUTPUT ASSIGNMENTS
- 6.5 TELETYPE OUTPUT ASSIGNMENTS
- 6.6 LATERAL-TELL ROUTING TABLE

7.0 MANUAL INPUTS

1.0 SECTOR POSITIONAL DATA

SECTOR - PORTLAND

REGION - 25TH

AMP NO. 003

1.1 SECTOR PROGRAM BOUNDARIES

1.1.1 MODE I BOUNDARY

REF	LATITUDE	LONGITUDE
01	045 50 00	133 30 00
02	045 50 00	121 50 00
03	044 00 00	120 50 00
04	044 00 00	120 00 00
05	040 00 00	120 00 00
06	040 00 00	131 00 00
07	040 00 00	132 30 00
08	OPEN TO WEST	

1.1.2 MODE II BOUNDARIES

REF	MODE IIA - NONE LATITUDE	LONGITUDE
-----	-----------------------------	-----------

REF	MODE IIB - SAN FRANCISCO LATITUDE	LONGITUDE
01	045 50 00	133 30 00
02	045 50 00	121 50 00
03	044 00 00	120 50 00
04	044 00 00	120 00 00
05	040 00 00	120 00 00
06	037 30 00	119 10 00
07	037 30 00	129 46 00
08	OPEN TO WEST	

1.2 MAJOR WORLD GEOREFS SURROUNDING XI AREA

SWITCH CODE	GECREF	SWITCH CODE	GEOREF	SWITCH CODE	GEOREF
1	CH	4	CH	7	EH
2	CJ	5	CJ	8	EJ
3	CK	6	CK	9	EK

1.3 ADJACENT AUTOMATIC AND MANUAL SECTORS

AUTOMATIC SECTOR NAME	AUTO LTR. DSG.	SECTOR REF.NO. (EQ.ID.)	D/L TIED	AMP NO.	SWITCH CODE	MAN LTR. DSG.	MANUAL SECTOR NAME **
LOS ANGELES	U	10		017	0 *		
SEATTLE	G	2	YES	012	1 2 3 4		
RENO	X	5	YES	016	5 6 7		
SAN FRANCISCO	T	8	YES	018	8		
SPOKANE	Y	9	YES	015	9		

*SWITCH NO. 0 ON 10PB MODULES AND SWITCH NO. 10 ON 15PB MODULES

**ONLY MDC'S WITH CC TTY OUTPUT ARE INDICATED

1.4 LAND SEA LINES

		NORTH POINT		SOUTH POINT	
1	MODE I	045 50 00	124 00 00	040 00 00	124 15 00
2	MODE IIA	NONE			
3	MODE IIB	045 50 00	124 30 00	037 30 00	123 15 00

1.5 AIR DEFENSE IDENTIFICATION ZONE - ADIZ/CADIZ

REF	LATITUDE	LONGITUDE
01	050 02 00	128 00 00
02	048 30 00	125 00 00
03	048 30 00	124 45 00
04	048 00 00	125 15 00
05	046 16 00	124 30 00
06	043 00 00	124 40 00
07	040 00 00	124 35 00
08	038 50 00	124 00 00
09	034 50 00	121 10 00

9 APRIL 1963

9

TM(ADC)82C/252/00A

1.6 SECTOR MINIMUM ENROUTE ALTITUDE. 16500 FEET

1.7 TACAN TRANSMITTER NEAREST SECTOR CENTER

LATITUDE	LONGITUDE
044 08 00	123 13 00

▷ 1.8.0 MAGNETIC VARIATION LINES

LINE NO.	VARIATION	NORTHERN POINTS LATITUDE	POINTS LONGITUDE	SOUTHERN POINTS LATITUDE	POINTS LONGITUDE
1	26 DEG E	052 00 00	129 00 00	051 27 00	135 00 00
2	24 DEG E	050 20 00	120 35 00	048 40 00	131 05 00
3	22 DEG E	050 00 00	115 00 00	044 50 00	130 47 00
4	20 DEG E	046 25 00	115 00 00	041 43 00	130 00 00
5	18 DEG E	042 33 00	115 00 00	037 08 00	130 00 00
6	16 DEG E	037 45 00	115 00 00	032 20 00	130 00 00

▷ 1.8.1 MAGNETIC VARIATION AT SECTOR CENTER 20 DEGREES EAST

1.9 X2 DISPLAY DATA

X2 DISPLAY CENTER
LATITUDE LONGITUDE

042 04 37 125 04 08

X2 DISPLAY VERTICES
LATITUDE LONGITUDE

1	NE	047 58 59	115 58 55
2	SE	035 42 11	117 25 20
3	SW	035 34 50	132 31 35
4	NW	047 48 58	134 20 30



2.0 RADAR DATA

2.1 LONG RANGE RADARS,
LRR-HF-ALRR

MULTIPLEXED GAP FILLER RADARS

SWCH. CODE*	SITE DESIG.	NO. CF TIED HF'S	LTR. DSG.	MODE	AMP NO.	SWCH. CODE	SITE DESIG.	SWCH. CODE	SITE DESIG.
0	M-118	0	A	OL	058				
1	**P-12	2	B	I	069	0	P-12A	3	
						1	P-12B	4	
						2	P-12C	5	
2	**P-33	2	C	I	091				
3	**TM-180	2	D	I	174				
4									
5	**SM-157	2	F	I	161	0	SM-157A	3	
						1	P-33A/SM-157B	4	
						2		5	
6	**P-57	0	G	OL	113				
7	**M-100	2	H	I	040	0	M-100A	3	
						1		4	
						2		5	
▷ 8	P-37	2	J	IIB/OL	095				
9									
10									
11	P-38	2	M	IIB	096				
12									
13									

*SAME AS REFERENCE NO. MINUS 1, ID CODE, AND WARNING LIGHT NUMBER. TO OBTAIN LRR PROGRAM CHANNEL NUMBER ADD 35, TO OBTAIN MKX PROGRAM CHANNEL NUMBER ADD 49

** 6 LRR'S WITH THE MOST MODE I COVERAGE.

GFR IDENTITY NUMBER AND SWITCH CODE BASED ON IMPLEMENTATION OF SPCR 1579

9 APRIL 1963

11

TM(ADC)820/252/00A

2.2 GAP FILLER RADARS

GFR CH NO*	SITE IDENT	MODE	AMP NO.	TIED LRR SWCH CODE	GFR SWCH CODE**
0	P-12A	I	060	1	0
1	P-12B	I	061	1	1
2	P-12C	I	062	1	2
3	P-33A/SP-157B	I	095	5	1
4	M-100A	I	037	7	0
5					
6	SM-157A	I	161	5	0
7					
8	THRU 34 BLANK				

*SAME AS REFERENCE NUMBER MINUS 1

**GFR SWITCH CODE BASED ON IMPLEMENTATION OF SPCR 1579

2.3 LOCATION OF POINT NOT WITHIN ANY HF SHADOW AREA

LATITUDE	LONGITUDE
046 34 30	122 35 30

15 OCTOBER 1962

12

TM(ADC)820/252/00

2.4 LRR DRUM CHANNEL ASSIGNMENTS

SDDU CONNECTIONS

SITE LOCATION	TELCO TERMINAL	I.B.M. TERMINAL	CHANNEL NUMBER	SITE IDENT
DRUM FIELD 1 (35)				
P-12	3F- 1	3F- 1	1	0001
	3F- 2	3F- 2	2	0001
P-57	3F- 3	3F- 3	3	0110
	3F- 4	3F- 4	4	0110
P-37	3F- 5	3F- 5	5	1000
	3E- 6	3E- 6	6	1000
	3E- 7	3E- 7	7	
	3E- 8	3E- 8	8	
SM-157	3E- 9	3E-11	11	0101
	3E-10	3E-12	12	0101
M-118	3D-11	3D-13	13	0000
	3D-12	3D-14	14	0000
	3D-13	3D-15	15	
	3D-14	3D-16	16	
	3D-15	3D-17	17	
	3C-16	3C-18	18	
DRUM FIELD 2 (37)				
P-38	3C-17	3C-19	19	1011
	3C-18	3C-20	20	1011
M-100	3C-19	3C-21	21	0111
	3C-20	3C-22	22	0111
P-33	3B-21	3B-23	23	0010
	3B-22	3B-24	24	0010
TM-180	3B-23	3B-25	25	0011
	3B-24	3B-26	26	0011
	3B-25	3B-29	29	
	3A-26	3A-30	30	
	3A-27	3A-31	31	
	3A-28	3A-32	32	
	3A-29	3A-33	33	
	3A-30	3A-34	34	
	4F-31	4F-35	35	
	4F-32	4F-36	36	

9 APRIL 1963

13

TM(ADC)82C/252/00A

3.0 AIRBASE DATA

3.1 MANNED INTERCEPTOR AIR BASES AND SQUADRONS

REF#	NAME	CSG	MODE-TYPE INDICATOR			MODE	SWCH CODE	SQUADRONS		AMP NO.
			I	IIA	IIB			UNIT	CSG	
01	PORTLAND INT ORE	PDX	S		S	I	14	460 FIS	PL	127
								123 ANG	KH	127
02	KINGSLEY AFB ORE	LMT	S		S	I	13	322 FIS	MK	065
03	HAMILTON AFB CALIF	SRF	R		S	IIB	12	84 FIS	TP	055
								83 FIS	GH	055
04	TRAVIS AFB CALIF	SUU	R		S	IIB	11	82 FIS	EN	152
05	LARSON AFB WASH	LRN	R		R	OL	10			071
06	MCCHORD AFB, WASH	TCM	R		R	OL	9			081
07	BEALE AFB CAL	BAB	R		S	IIB	8			007
08	FALLON NAS NEV	NSV	R		R	OL	7			036
09	SISKIYOU CTY. CALIF	SIY	S		S	I	6			182
10	WALLA WALLA CTY., WA	ALW	<u>R</u>		<u>R</u>	<u>OL</u>	5			184
11	PORTLAND 1 ORE	PD1	R		R	I	4			128
12	PORTLAND 2 ORE	PD2	R		R	I	3			129
13	KINGSLEY FLD 1 ORE	LM1	R		R	I	2			066
14	KINGSLEY FLD 2 ORE	LM2	R		R	I	1			067
15	CASTLE AFB CAL	MER	R		R	IIB	0			019

*SAME AS A/B CHANNEL NUMBER PLUS ONE

3.2 SAC/MATS BASES

	NAME	3 LTR DESIG	MODE*	AMP NO.
1	BEALE AFB, CALIF	BAB	II	008
2	FATHER AFB, CALIF	MHR	II	062
3	TRAVIS AFB, CALIF	SUL	II	093
4	CASTLE AFB, CALIF	MER	II/GL	016
5	MOFFETT NAS, CAL	NUG	II/GL	101

*MODE IS DEFINED HERE AS INCLUDING A 50 MILE OVERLAP ZONE

9 APRIL 1963

14

TM(ADC)820/252/00A

4.0 BOMARC DATA

4.1 BOMARC A BASES - NONE

4.2 BOMARC B BASES - NCNE

5.0 ARMY AIR DEFENSE COMMAND POST(AADCP) DATA

SWCH CODE#	NAME	OPTION	MODE	EQ.ID.	AMP NO.	PARENT SECTOR	MODE II CONTROL	OVERLAP COVERAGE
1	SAN FRANCISCO	AUTO	IIB	12	020	SF	PO	LA,RE
2								
3								
4								
5								
6								
7								
8								
9	SEATTLE	LTL	OL		021	SE	SP	PO
▷ 10	FAIRCHILD	LTL	OL		007	SP	SE	PO,GR,RE

*SAME AS AADCP NUMBER

6.0 COMMUNICATIONS DATA

6.1 TIME DIVISION DATA LINK RADIO SITES

REF.	IDENT	MODE	AMP NO.
01	M-100	I	090
02	P-33	I	153
03	TM-180	I	330
04	P-12	I	132
05	SM-157	I	307
06			
07	P-37	IIB	157

9 APRIL 1963

17

TM(ADC)820/252/00A

(last page)

6.6 LATERAL-TELL ROUTING TABLE - FIRST STOP

SECTOR DSG	1ST ROUTE	2ND ROUTE	3RD ROUTE	4TH ROUTE	5TH ROUTE
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12	2				
13					
14					
15	9				
16	5				
17	5	8			
18	8				
19	5	9			
20	5	9			
21	5	8			
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					

7.0 MANUAL INPUTS

SSR NO.	NAME/IDENT	TYPE	55-20 DESIG	SSR NO.	NAME/IDENT	TYPE	55-20 DESIG
01	STA 3 AND 13	AEW	MO	10	STA 5 AND 15	PV	MS
02	STA 5 AND 15	AEW	<u>IV</u>	11	STA 25	PV	MV
03	RP-1	MDC	GA	12	STA 27	PV	MW
04	STA 33	AEW	MX	13	STA 1	PV	GT
05	STA 21	AEW	GR	14			
06				15			
07				16			
08	STA 3 AND 13	PV	MF	17			
09	STA 23	PV	<u>MI</u>	18			

9 April 1963

TM(ADC)820/252/00 A

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AD8CP-E
AD8CP-T

SYSTEM DEVELOPMENT CORPORATION

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USG DAS (6) 4365
PPB SSG System Data (2) 20157
STB Run Designer 4770
PTG Control Unit Phoenix
FIB HQ 24191
FIB Group Head - McChord
FIB Team Heads - McChord
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